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NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

BLACKWELL, GWENDOLYN ANNETTE

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1775

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/645,836
Filing Date: August 22, 2003
Appellant(s): LINGLE ET AL.

Guardian Industries Corp.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 1, 2006 appealing from the Office action mailed January 9, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,060,178	Krisko	5-2000
6,472,072	Ebisawa	10-2002
6,355,334	Rondeau	3-2002
2003/0150711	Laird	8-2003
2002/0102352	Hartig	8-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-5, 9-14, 22-23, 31-33, 38-39, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 6,060,178, Krisko.

Regarding claims 1, 3-5, 10-14 and 22

Applicant claims the following layer structure, (claim 1):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers having certain physical properties. Krisko disclose a coated article comprised of a glass substrate with a multilayer coating formed thereon which is able to withstand the high temperatures associated with heat treatment, (column 1, lines 10-15). Example 2 demonstrates the following layer structure, (column 8, lines 35-59):

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Glass	
Si ₃ N ₄	86 Å
ZnO	50 Å
Ag	77 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	470 Å
ZnO	50 Å
Ag	145 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	245 Å

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because Example 2 of Krisko (see above) exemplifies Applicant's claimed multilayer coating structure, the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 1, 3-5 and 10-14.

Because the layer structure of Example 2 exemplifies the layer structure of presently pending claim 1 as demonstrated above, it would be expected that when the layer structure of Example 2 when heated according to the specifications of claim 22 that it would exhibit the same properties. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 22 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 22.

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Regarding claim 9 and 31

The silicon nitride layer formed next to the glass substrate can have a thickness ranging from 50-300 Å, (column 7, lines 26-29), meeting the requirements of claims 9 and 31.

Regarding claims 23, 32-33, and 38

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. Krisko disclose a coated article comprised of a glass substrate with a multilayer coating formed thereon which is able to withstand the high temperatures associated with heat treatment, (column 1, lines 10-15). Example 2 of Krisko demonstrates the following layer structure, (column 8, lines 35-59):

Glass	
Si ₃ N ₄	86 Å
ZnO	50 Å
Ag	77 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	470 Å
ZnO	50 Å
Ag	145 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	245 Å

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because Example 2 of Krisko (see above) exemplifies Applicant's claimed multilayer coating structure, the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 23 and 32-33.

Because the layer structure of Example 2 exemplifies the layer structure of presently pending claim 23 as demonstrated above, it would be expected that when the layer structure of Example 2 when heated according to the specifications of claim 38 that it would exhibit the same properties. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 38 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 38.

Regarding claim 39

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties. Krisko disclose a coated article comprised of a glass substrate with a multilayer coating formed thereon which is able to withstand the high temperatures associated with heat treatment, (column 1, lines 10-15). Example 2 demonstrates the following layer, (column 8, lines 35-59):

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Glass	
Si ₃ N ₄	86 Å
ZnO	50 Å
Ag	77 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	470 Å
ZnO	50 Å
Ag	145 Å
Nb	15 Å
ZnO	90 Å
Si ₃ N ₄	245 Å

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the layer structure of Example 2 exemplifies the layer structure of presently pending claim 39 as demonstrated above, it would be expected that when the layer structure of Example 2 when heated according to the specifications of claim 39 that it would exhibit the same physical properties. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 39 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 39.

Regarding claim 44

The coated substrate, which is be held synonymous with a monolithic glass substrate, can be formed of a glass substrate with a multilayer coating formed thereon that is used as a window of a self-cleaning oven, (column 3, lines 39-44), meeting the requirements of claim 44.

3. Claims 1, 3-5, 8, 10-14, 16-17, 19-23, 30, 32-33, 35-37, 39, and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent no. 6,472,072, Ebisawa et al.

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Regarding claims 1, 3-5, 10-14 and 22

Applicant claims the following layer structure, (claim 1):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers with the layer structure having certain physical properties. Ebisawa et al disclose a glazing panel having the following structure, (Example 1, column 6, lines 45-64):

	Reference number	Geometrical thickness	Atomic ratios
Glass substrate	10	2 mm	
Base dielectric comprising:	11		
AlSi _x N _y	12	40 Å	Si/Al = 0.5
ZnAlO _x	13	260 Å	Al/Zn = 0.1
ZnAlO _y underlying barrier	14	10 Å	Al/Zn = 0.1
Ag	15	100 Å	
ZnAlO _y overlying barrier	16	12 Å	Al/Zn = 0.1
Central dielectric comprising			
ZnAlO _x	17	770 Å	Al/Zn = 0.1
ZnAlO _y underlying barrier	18	7 Å	Al/Zn = 0.1
Ag	19	100 Å	
ZnAlO _y overlying barrier	20	17 Å	Al/Zn = 0.1
Top dielectric comprising:			
ZnAlO _x	22	185 Å	Al/Zn = 0.1
AlSi _x N _y	23	75 Å	Si/Al = 0.3

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because Example 1 of Ebisawa et al (see above) exemplifies Applicant's claimed multilayer coating structure, the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* are inherently present in the prior art. Absent an objective showing to the contrary, the addition

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of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 1, 3-5 and 10-14.

Because the layer structure of Example 1 exemplifies the layer structure of presently pending claim 1 as demonstrated above, it would be expected that when the layer structure of Example 1 when heated according to the specifications of claim 22 that it would exhibit the same properties. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 22 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 22.

Regarding claims 23, 32-33, and 38

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer. Ebisawa et al disclose a glazing panel having the following structure, (Example 1, column 6, lines 45-64), meeting the requirements of claim 23:

	Reference number	Geometrical thickness	Atomic ratios
Glass substrate	10	2 mm	
Base dielectric comprising:	11		
AlSixNy	12	40 Å	Si/Al = 0.5
ZnAlOx	13	260 Å	Al/Zn = 0.1
ZnAlOy underlying barrier	14	10 Å	Al/Zn = 0.1
Ag	15	100 Å	
ZnAlOy overlying barrier	16	12 Å	Al/Zn = 0.1
Central dielectric comprising			
ZnAlOx	17	770 Å	Al/Zn = 0.1
ZnAlOy underlying barrier	18	7 Å	Al/Zn = 0.1
Ag	19	100 Å	
ZnAlOy overlying barrier	20	17 Å	Al/Zn = 0.1
Top dielectric comprising:			
ZnAlOx	22	185 Å	Al/Zn = 0.1
AlSixNy	23	75 Å	Si/Al = 0.3

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because Example 1 of Ebisawa et al (see above) exemplifies Applicant's claimed multilayer coating structure, the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 23 and 32-33.

Because the layer structure of Example 1 exemplifies the layer structure of presently pending claim 23 as demonstrated above, it would be expected that when the layer structure of Example 1 when heated according to the specifications of claim 38 that it would exhibit the same properties. Absent an objective showing to the contrary, the addition of the claimed physical

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properties to claim 38 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 38.

Regarding claim 39

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties. Ebisawa et al disclose a glazing panel having the following structure, (Example 1, column 6, lines 45-64), meeting the requirements of claim 39:

	Reference number	Geometrical thickness	Atomic ratios
Glass substrate	10	2 mm	
Base dielectric comprising:	11		
AlSixNy	12	40 Å	Si/Al = 0.5
ZnAlOx	13	260 Å	Al/Zn = 0.1
ZnAlOy underlying barrier	14	10 Å	Al/Zn = 0.1
Ag	15	100 Å	
ZnAlOy overlying barrier	16	12 Å	Al/Zn = 0.1
Central dielectric comprising			
ZnAlOx	17	770 Å	Al/Zn = 0.1
ZnAlOy underlying barrier	18	7 Å	Al/Zn = 0.1
Ag	19	100 Å	
ZnAlOy overlying barrier	20	17 Å	Al/Zn = 0.1
Top dielectric comprising:			
ZnAlOx	22	185 Å	Al/Zn = 0.1
AlSixNy	23	75 Å	Si/Al = 0.3

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. MPEP 2112.01. Because the layer structure of Example 1 exemplifies the layer structure of presently pending claim 39 as demonstrated above, it would be expected that when the layer structure of Example 1 when

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heated according to the specifications of claim 39 that it would exhibit the same physical properties. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 39 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 39.

Regarding claims 8, 16, 30, and 44

The glazing panel can be used in a laminated vehicle windscreen wherein after heat treatment the first layer comprised of silicon nitride which is next to the glass substrate is partially oxidized resulting in some silicon oxynitride being present in the layer, meeting the requirements of claims 16 and 44.

Because Example 1 after heat treatment, (columns 7-8, lines 58-20), of Ebisawa et al exemplifies Applicant's claimed multilayer coating structure, the claimed physical property relating to the index of refraction is inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed physical property to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 8 and 30.

Regarding claims 17 and 35

According to Example 1 set forth above the zinc oxide and silicon nitride layer further includes aluminum, meeting the requirements of claims 17 and 35.

Regarding claims 19-21 and 36-37

According to Example 1 the laminated vehicle windscreen has the following properties:

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Property	Prior to heat treatment ^{see Note 1} below	Following heat treatment ^{see Note 2} below
TL(Illuminant A)	65%	76%
TE (System Moon 2)	40%	43%
haze	0.1	0.2
a*	-15 (coated side)	-2 (external)
b*	+1 (coated side)	-10 (external)
RE (System Moon 2)	29% (coated side)	31% (external)

Note 1: Measure for monolithic glazing panel with coating prior to heat treatment

Note 2: Measured following heat treatment at 650° C. for 10 minutes with bending and tempering, and lamination with clear 2 mm glass sheet and 0.76 mm clear pvb

wherein the total solar value as exemplified by Applicant is being held synonymous with Ebisawa et al's TE value, meeting the requirements of claims 19-21 and 36-37.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 23, 32-33, 35, 38-39 and 44 are under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over United States Patent no. 6,355,334, Rondeau et al.

Regarding claims 23, 32-33, 35, and 38

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. Rondeau et al disclose a transparent substrate provide with a thin film stack wherein the coated substrate can undergo heat treatments, (column 6, lines 44-47).

The coating can have the following structure, (column 3, lines 55-60):

Glass/SnO₂ or Si₃N₄:Al or AlN/ZnO or ZnO:Al/Ag/Ti or
NiCr/ZnO or SnO₂/SiO₂ or Al₂O₃ or SiO₂:Al₂O₃/SnO₂
or ZnO or SnZnO_x or AlN or Si₃N₄:Al or (AlN/
Si₃N₄:Al) or (Si₃N₄:Al/AlN) or (SnO₂/SnZnO_x)

In the alternative, while not teaching a specific example with silicon nitride as the first dielectric layer it would have been within the skill of one in the art to select silicon nitride as it is listed as an equivalent to tin oxide and aluminum nitride.

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because Rondeau et al (see above) exemplifies Applicant's claimed multilayer coating structure, the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* are inherently present in the prior art. Absent an objective showing to the contrary, the addition of the claimed

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physical properties to the claim language fails to provide patentable distinction over the prior art of record, meeting the requirements of claims 23 and 32-33.

Materials such as aluminum can be used to dope the zinc oxide and silicon nitride layers, (column 3, lines 10-34), meeting the requirements of claim 35.

Because the layer structure of Rondeau et al exemplifies the layer structure of presently pending claim 23 as demonstrated above, it would be expected that when the layer structure is heated according to the specifications of claim 38 that it would exhibit the same properties as claim 38. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 38 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 38.

Regarding claim 39

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer. Rondeau et al disclose a transparent substrate provide with a thin film stack wherein the coated substrate can undergo heat treatments, (column 6, lines 44-47). The coating can have the following structure, (column 3, lines 55-60):

Glass/SnO₂ or Si₃N₄:Al or AlN/ZnO or ZnO:Al/Ag/Ti or
NiCr/ZnO or SnO₂/SiO₂ or Al₂O₃ or SiO₂:Al₂O₃/SnO₂
or ZnO or SnZnO_x or AlN or Si₃N₄:Al or (AlN/
Si₃N₄:Al) or (Si₃N₄:Al/AlN) or (SnO₂/SnZnO_x)

When the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent. *MPEP 2112.01*. Because the layer

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structure of Rondeau et al exemplifies the layer structure of presently pending claim 39 as demonstrated above, it would be expected that when the layer structure is heated according to the specifications of claim 39 that it would exhibit the same properties as claim 39. Absent an objective showing to the contrary, the addition of the claimed physical properties to claim 39 fails to provide a patentable distinction over the prior art of record, meeting the limitations of claim 39.

In the alternative, while not teaching a specific example with silicon nitride as the first dielectric layer it would have been within the skill of one in the art to select silicon nitride as it is listed as an equivalent to tin oxide and aluminum nitride.

Regarding claim 44

The coated substrate, which is be held synonymous with a monolithic glass substrate, can be formed of a glass substrate with a multilayer coating formed thereon that is used as a window glazing, (column 4, lines 1-4), meeting the requirements of claim 44.

Claim Rejections - 35 USC § 103

7. Claims 1, 6-7, 15-16, 18, 23, 28-29, 34, 39, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication no. 2003/0150711, Laird in view of United States Patent Application Publication no. 2002/0102352, Hartig et al.

Regarding claims 1, 23, and 39

Applicant claims the following layer structure, (claim 1):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers.

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Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer.

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer.

Laird discloses a coated article with high visible transmission and low emissivity wherein the layer structure of the coated article is as follows:

TABLE 1

(Example Materials/Thicknesses: FIG. 1 Embodiment)

Layer	Preferred Range (Å)	More Preferred (Å)	Example (Å)
TiO ₂ (layer 3)	0-700 Å	100-400 Å	200 Å
ZnO _x (layer 7)	25-200 Å	40-150 Å	90 Å
Ag (layer 9)	50-250 Å	80-200 Å	130 Å
NiCrO _x (layer 11)	5-100 Å	15-60 Å	30 Å
SnO ₂ (layer 13)	0-1,000 Å	500-900 Å	680 Å
ZnO _x (layer 17)	25-200 Å	40-150 Å	90 Å
Ag (layer 19)	50-250 Å	80-220 Å	168 Å
NiCrO _x (layer 21)	5-100 Å	15-60 Å	30 Å
SnO ₂ (layer 23)	0-500 Å	70-200 Å	125 Å
Si ₃ N ₄ (layer 25)	0-500 Å	120-320 Å	220 Å

Layer 3, in the example set forth above is listed as TiO₂, is the first dielectric layer that can also be silicon nitride. Laird does not specifically disclose examples having silicon nitride in the place of titanium dioxide as the first dielectric layer.

Although no specific example has been listed using silicon nitride as the first dielectric layer, silicon nitride has been listed as an equivalent material for titanium dioxide, (page 2,

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section 0038). As such, it would have been within the skill of one in the art at the time of invention to substitute the silicon nitride for the titanium dioxide as the first dielectric layer. As the layer structure of the aforementioned claims meets the structural limitations as set forth by Applicant in claims 1, 23, and 39 it would be expected that the physical properties would also be present after heat treatment.

Regarding claims 6-7, 15, 28-29, 34, and 43

According to Laird, the first dielectric layer comprised of silicon nitride contains the nitride in a stoichiometric or non-stoichiometric state having the formula Si_xN_y wherein x/y is in the range of 0.75-1.5. The Si-rich layer can have a refractive index ranging from 2.0-2.7, (page 2, section 0038).

Regarding claims 16

Laird discloses that the heat treatable, (page 1, section 0001), coated article can be a laminated windshield as demonstrated in Figure 2 and page 1, section 0036.

Regarding claim 18

Laird discloses the structural limitation of claim 1 above. Laird does not specifically disclose that a layer of silicon nitride should be placed between the ZnO and SnO_2 layers above the first Ag layer but below the second Ag layer.

Hartig et al disclose a haze resistant film stack wherein the intermediate layers formed between the first and second Ag layers has silicon nitride next to zinc oxide, (page 4, sections 0026-0028).

Laird and Hartig et al disclose inventions related to coated articles that can be used as vehicle and building window glazings. As such, it would be within the skill of one in the art at the time of invention to modify the layer structure of Laird by inserting a silicon nitride layer

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between the ZnO and SnO₂ located between the first and second Ag layers in order to prevent propagation of ZnO grain boundaries outside of the thickness of the layer in which ZnO is applied as well as significantly reduce the haze which may occur from high temperature treatment, (Hartig et al, page 4, section 0028).

(10) Response to Argument

It is noted in Applicant's section (VI) Grounds of Rejection to Be Reviewed on Appeal, Applicant has set forth four grounds of rejection with headers 1, 2, 3, and 4. It is also noted in Applicant's section (VII) Argument, that arguments are set forth with headers A, B, C, and D. It is clear from the content of the arguments section under each header that header 1=A, header 2=B, header 3=D, and header 4=C.

Applicant's arguments filed December 1, 2006 have been fully considered but they are not persuasive.

With regards to A. Section 102(b) Rejections based on Krisko (US 6,060,178)

Claim 1

Applicant contends that Krisko fails to disclose the physical characteristics of claim 1. Applicant claims the following layer structure, (claim 1):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers. In addition to the first three layers located on and contacting each other, the coating encompasses additional physical characteristics.

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Applicant's arguments are not persuasive as Applicant is utilizing an Example that was not used as part of the rejection. The layer structure of Example 2 meets the limitations of Applicant's claim 1. Applicant's claim 1 uses comprising language, which allows for additional layers in addition to the claimed limitations. As the layer structure of Example 2 is substantially identical to Applicant's claim 1, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 2 would not necessarily possess the physical limitations of Applicant's claim 1. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. In fact, Example 1 is not the same layer structure as set forth in Example 2 nor does the layer structure meet the limitations of Applicant's claim 1, (see below):

<u>Example 1</u>	<u>Example 2</u>	<u>Applicant's Claim 1</u>
glass	glass	glass
Si3N4	Si3N4	Si3N4
Nb	ZnO	ZnO
Ag	Ag	Ag
Nb	Nb	metal oxide
Si3N4	ZnO	Ag
	Si3N4	dielectric
	ZnO	
	Ag	
	Nb	
	ZnO	
	Si3N4	

As the layer structure of Example 1 and Example 2 are not the same, it would be difficult to say the layer structure of Example 2 would not meet Applicant's claim 1.

Claims 3, 4, 5, 11, 12, 13, and 14

Applicant contends that Krisko does not disclose or suggest the T_{vis}/R_s and/or heat treated coated article having a certain ΔE^* value as set forth in claims 3, 4, 5, 11, 12, 13, and 14.

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As the layer structure of Example 2 is substantially identical to Applicant's claim 1 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 2 would not necessarily possess the physical limitations of Applicant's claims 3, 4, 5, 11, 12, 13, and 14. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claim 23

Applicant contends that Krisko fails to disclose or suggest the features of claim 23, for the reasons discussed above with respect to claim 1.

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. In addition to the aforementioned limitations, the coating encompasses additional physical characteristics.

Applicant's arguments are not persuasive as Applicant is utilizing an Example that was not used as part of the rejection. The layer structure of Example 2 meets the limitations of Applicant's claim 23. Applicant's claim 23 uses comprising language, which allows for additional layers in addition to the claimed limitations. As the layer structure of Example 2 is substantially identical to Applicant's claim 23, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 2 would not necessarily possess the physical limitations of Applicant's claim 23. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. In fact,

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Example 1 is not the same layer structure as set forth in Example 2 nor does the layer structure meet the limitations of Applicant's claim 23, (see below):

<u>Example 1</u>	<u>Example 2</u>	<u>Applicant's Claim 23</u>
glass	glass	glass
Si3N4	Si3N4	Si3N4
Nb	ZnO	ZnO
Ag	Ag	Ag
Nb	Nb	at least one dielectric layer
Si3N4	ZnO	
	Si3N4	
	ZnO	
	Ag	
	Nb	
	ZnO	
	Si3N4	

As the layer structure of Example 1 and Example 2 are not substantially the same, it would be difficult to say the layer structure of Example 2 would not meet Applicant's claim 23.

Claim 33

Applicant contends that Krisko does not disclose or suggest a heat treated coated article having a certain ΔE^* value as set forth in claim 33.

As the layer structure of Example 2 is substantially identical to Applicant's claim 33 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 2 would not necessarily possess the physical limitations of Applicant's claim 33. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

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Claim 39

Applicant contends that Krisko does not disclose or suggest a heat treated coated article having a particular T_{vis}/R_s ratio and a certain ΔE^* value as set forth in claim 39.

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties.

Applicant's arguments are not persuasive as Applicant is utilizing an Example that was not used as part of the rejection. The layer structure of Example 2 meets the limitations of Applicant's claim 39. Applicant's claim 39 uses comprising language, which allows for additional layers in addition to the claimed limitations. As the layer structure of Example 2 is substantially identical to Applicant's claim 39 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 2 would not necessarily possess the physical limitations of Applicant's claim 39. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. In fact, Example 1 is not the same layer structure as set forth in Example 2 nor does the layer structure meet the limitations of Applicant's claim 39, (see below):

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<u>Example 1</u>	<u>Example 2</u>	<u>Applicant's Claim 39</u>
glass	glass	glass
Si3N4	Si3N4	Si3N4
Nb	ZnO	at least one metal oxide layer
Ag	Ag	Ag
Nb	Nb	at least one dielectric layer
Si3N4	ZnO	
	Si3N4	
	ZnO	
	Ag	
	Nb	
	ZnO	
	Si3N4	

As the layer structure of Example 1 and Example 2 are not substantially the same, it would be difficult to say the layer structure of Example 2 would not meet Applicant's claim 39.

With regards to B. Section 102(e) Rejections Based on Ebisawa (US 6,472,072)

Claim 1

Applicant contends Ebisawa does not disclose or suggest the T_{vis}/R_s ratio and a certain ΔE^* value as set forth in claim 1.

Applicant claims the following layer structure, (claim 1):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers. In addition to the first three layers located on and contacting each other, the coating encompasses additional physical characteristics.

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Applicant's arguments are not persuasive as Applicant is relying on the data from other examples to suggest that the example used for the rejection would not inherently meet Applicant's claim 1 limitations. Example 1 is the closest example, which meets the structural limitations of Applicant's claim 1 as shown below:

<u>Example 1</u>	<u>Example 3</u>	<u>Example 4 (comparative)</u>	<u>Applicant's Claim 1</u>
glass	glass	glass	glass
AlSixNy	AlSixNy	AlN	Si3N4
ZnAlOx	ZnAlOx	ZnAlOx	at least one metal oxide layer
ZnAlOy	Ag (Pd)	Ag (Pd)	Ag
Ag	ZnAl	ZnAl	at least one dielectric layer
ZnAlOy	ZnAlOx	ZnAlOx	
ZnAlOx	Ag (Pd)	Ag (Pd)	
ZnAlOy	ZnAlOx	ZnAlOx	
Ag	AlSixNy	AlN	
ZnAlOy			
ZnAlOx			
AlSixNy			

Example 3 uses a doped Ag film, which Example 1 does not, and Example 4 is a comparative example, which does not utilize silicon nitride at all, which is a requirement for Applicant's claim 1. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 1 would not necessarily possess the physical limitations of Applicant's claim 1. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claims 3, 4, 5, 8, 11, 12, 13, and 14

Applicant contends that Ebisawa does not disclose or suggest the T_{vis}/R_s and/or heat treated coated article having a certain ΔE^* value as set forth in claims 3, 4, 5, 11, 12, 13, and 14.

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As the layer structure of Example 1 is substantially identical to Applicant's claim 1 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 1 would not necessarily possess the physical limitations of Applicant's claims 3, 4, 5, 11, 12, 13, and 14. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claim 23

Applicant contends that Ebisawa fails to disclose or suggest the features of claim 23, for the reasons discussed above with respect to claim 1.

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. In addition to the aforementioned limitations, the coating encompasses additional physical characteristics.

Applicant's arguments are not persuasive as Applicant is relying on the data from other examples to suggest that the example used for the rejection would not inherently meet Applicant's claim 23 limitations. Example 1 is the closest example, which meets the structural limitations of Applicant's claim 1 as shown below:

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<u>Example 1</u>	<u>Example 3</u>	<u>Example 4 (comparative)</u>	<u>Applicant's Claim 23</u>
glass AlSixNy	glass AlSixNy	glass AlN	glass Si3N4
ZnAlOx	ZnAlOx	ZnAlOx	ZnO
ZnAlOy	Ag (Pd)	Ag (Pd)	Ag
Ag	ZnAl	ZnAl	dielectric
ZnAlOy	ZnAlOx	ZnAlOx	
ZnAlOx	Ag (Pd)	Ag (Pd)	
ZnAlOy	ZnAlOx	ZnAlOx	
Ag	AlSixNy	AlN	
ZnAlOy			
ZnAlOx			
AlSixNy			

Example 3 uses a doped Ag film and a ZnAl film, which Example 1 does not, and Example 4 is a comparative example, which does not utilize silicon nitride at all, which is a requirement for Applicant's claim 23. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 1 would not necessarily possess the physical limitations of Applicant's claim 23. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claims 30 and 33

Applicant contends that Ebisawa does not disclose or suggest a heat treated coated article having a certain ΔE^* value as set forth in claims 30 and 33.

As the layer structure of Example 1 is substantially identical to Applicant's claims 30 and 33 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 1 would not necessarily possess the physical limitations of Applicant's claims 30 and 33. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

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Claim 39

Applicant contends that Ebisawa does not disclose or suggest a heat treated coated article having a particular T_{vis}/R_s ratio and a certain ΔE^* value as set forth in claim 39.

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties.

Applicant's arguments are not persuasive as Applicant is relying on the data from other examples to suggest that the example used for the rejection would not inherently meet Applicant's claim 39 limitations. Example 1 is the closest example, which meets the structural limitations of Applicant's claim 39 as shown below:

<u>Example 1</u>	<u>Example 3</u>	<u>Example 4 (comparative)</u>	<u>Applicant's Claim 39</u>
glass	glass	glass	glass
AlSixNy	AlSixNy	AlN	Si3N4
ZnAlOx	ZnAlOx	ZnAlOx	metal oxide
ZnAlOy	Ag (Pd)	Ag (Pd)	Ag
Ag	ZnAl	ZnAl	dielectric
ZnAlOy	ZnAlOx	ZnAlOx	
ZnAlOx	Ag (Pd)	Ag (Pd)	
ZnAlOy	ZnAlOx	ZnAlOx	
Ag	AlSixNy	AlN	
ZnAlOy			
ZnAlOx			
AlSixNy			

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Example 3 uses a doped Ag film and a ZnAl film (not a dielectric), which Example 1 does not, and Example 4 is a comparative example, which does not utilize silicon nitride at all, which is a requirement for Applicant's claim 39. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of Example 1 would not necessarily possess the physical limitations of Applicant's claim 39. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

With regards to D. Section 103(a) Rejections based on Laird in view of Hartig

(Typo, the section should read *Section 102(e)/103(a) Rejection based on Rondeau (US 6,355,334)*)

Claim 23

Applicant contends that Rondeau fails to disclose or suggest the features of claim 23.

Applicant claims the following layer structure, (claim 23):

glass/silicon nitride/zinc oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. In addition to the aforementioned limitations, the coating encompasses additional physical characteristics.

The layer structure of Rondeau's example meets the limitations of Applicant's claim 23 as demonstrated below:

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<u>Example</u>	<u>Applicant's Claim 23</u>
glass	glass
SnO ₂ /Si ₃ N ₄ :Al/AlN	Si ₃ N ₄
ZnO/ZnO:Al	ZnO
Ag	Ag
Ti/NiCr	dielectric
ZnO/SnO ₂	
SiO ₂ /Al ₂ O ₃ /SiO ₂ :Al ₂ O ₃	
SnO ₂ /ZnO/SnZnOx/AlN/Si ₃ N ₄ :Al/ (AlN/Si ₃ N ₄ :Al)/(Si ₃ N ₄ :Al/AlN)/(SnO ₂ /SnZnOx)	

Applicant's arguments are not persuasive as Applicant has not rebutted the presumption of inherency through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the physical limitations of Applicant's claim 23. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claim 33

Applicant contends that Rondeau does not disclose or suggest a heat treated coated article having a certain ΔE^* value as set forth in claim 33.

As the layer structure of the example is substantially identical to Applicant's claim 33 layer structure, the claimed physical properties are presumed to be present. Applicant has not rebutted this presumption through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the physical limitations of Applicant's claim 33. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Claim 39

Applicant contends that Rondeau does not disclose or suggest a heat treated coated article having a particular T_{vis}/R_s ratio and a certain ΔE^* value as set forth in claim 39.

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Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties.

The layer structure of Rondeau's example meets the limitations of Applicant's claim 39 as demonstrated below:

Example	Applicant's Claim 39
glass	glass
SnO ₂ /Si ₃ N ₄ :Al/AlN	Si ₃ N ₄
ZnO/ZnO:Al	metal oxide
Ag	Ag
Ti/NiCr	dielectric
ZnO/SnO ₂	
SiO ₂ /Al ₂ O ₃ /SiO ₂ :Al ₂ O ₃	
SnO ₂ /ZnO/SnZnOx/AlN/Si ₃ N ₄ :Al/ (AlN/Si ₃ N ₄ :Al)/(Si ₃ N ₄ :Al/AlN)/(SnO ₂ /SnZnOx)	

Applicant's arguments are not persuasive as Applicant has not rebutted the presumption of inherency through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the physical limitations of Applicant's claim 39. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

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With regards to C. Section 103(a) Rejections based on Laird in view of HartigClaims 1 and 6

Applicant contends that Laird and Hartig, either taken alone or in combination fail to disclose or suggest the particular T_{vis}/R_s ratio and ΔE^* values as required by claims 1 and 6.

Applicant also contends that Laird's coated article is designed to be non-heat treated.

Applicant claims the following layer structure, (claims 1 and 6):

glass/silicon nitride/zinc oxide/Ag/dielectric (metal oxide)/Ag/dielectric

wherein the glass, silicon nitride, zinc oxide and first Ag layers are all located on and contacting each other without any other layers located between the aforementioned layers. In addition to the first three layers located on and contacting each other, the coating encompasses additional physical characteristics.

The layer structure of Laird as compared to Applicant's claims 1 and 6 are set forth below:

<u>Example</u>	<u>Applicant's Claims 1 and 6</u>
glass	glass
TiOx	Si3N4
ZnOx	ZnO
Ag	Ag
NiCrOx	dielectric (metal oxide)
SnO2	Ag
ZnOx	dielectric
Ag	
NiCrO	
SnO2	
Si3N4	

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wherein SixNy (silicon nitride) can be substituted for the TiOx layer, (Laird, page 2, section 0038). Embodiments of Laird can be heat treated, (page 4, section 0049), therefore not teaching away from the use of the layer structure in a heat treated article. As the layer structure of Laird is substantially the same as that claimed by Applicant in claims 1 and 6, the physical characteristics of claims 1 and 6 would be present in the prior art. Applicant's arguments are not persuasive as Applicant has not rebutted the presumption of inherency through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the physical limitations of Applicant's claims 1 and 6. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Applicant further contends that Applicant's claims 1 and 6 are entitled to the filing dated of parent case 10/400,080 (filed March 27, 2003) and that Laird would not be prior art as Laird is commonly owned with the instant application at the time of invention and thus could not be used in a Section 103 rejection if claims 1 and 6 are entitled to a filing date of March 27, 2003.

Applicant's arguments are not persuasive. While it is noted that 10/400,080 ('080) is a parent case, the present case is a continuation in part. The parent application '080 while disclosing a similar layer structure does include a TiOx layer next to the glass substrate and under a Si₃N₄/SixNy layer. Although it is mentioned that the TiOx layer is optional, all of the examples include the TiOx layer. In addition, the physical characteristics as set forth in the '080 specification are significantly different from those set forth in the presently pending claims. For the aforementioned reasons, the present claims are not given the priority date of March 27, 2003, but the filing date, August 22, 2003, which would make the Laird rejection Section 103 rejection based upon a Section 102(a) reference.

Claim 18

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Applicant contends that claim 18 is only rejected under Laird. This is incorrect. Claim 18 is based on a Section 103 rejection of Laird in view of Hartig.

Applicant further contends that Applicant's claim 18 is entitled to the filing date of parent case 10/400,080 (filed March 27, 2003) and that Laird would not be prior art as Laird is commonly owned with the instant application at the time of invention and thus could not be used in a Section 103 rejection if claim 18 is entitled to a filing date of March 27, 2003.

Applicant's arguments are not persuasive. While it is noted that 10/400,080 ('080) is a parent case, the present case is a continuation in part. The parent application '080 while disclosing a similar layer structure does include a TiOx layer next to the glass substrate and under a Si₃N₄/SixNy layer. Although it is mentioned that the TiOx layer is optional, all of the examples include the TiOx layer. In addition, the physical characteristics as set forth in the '080 specification are significantly different from those set forth in the presently pending claims. For the aforementioned reasons, the present claims are not given the priority date of March 27, 2003, but the filing date, August 22, 2003, which would make the Laird rejection Section 103 rejection based upon a Section 102(a) reference.

Claims 23 and 28

Applicant contends that Laird fails to disclose or suggest the features of claim 23, for the reasons discussed above with respect to claims 1 and 5. It is noted that Applicant references claim 5, however from the argument section it is clear that it should have been "with respect to claims 1 and 6".

Applicant claims the following layer structure, (claims 23 and 28):

glass/silicon nitride/zinc oxide/Ag/dielectric

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wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the zinc oxide layer with the layer structure having certain physical properties. In addition to the aforementioned limitations, the coating encompasses additional physical characteristics.

The layer structure of Laird as compared to Applicant's claims 23 and 28 are set forth below:

<u>Example</u>	<u>Applicant's Claims 23 and 28</u>
glass	glass
TiOx	Si3N4
ZnOx	ZnO
Ag	Ag
NiCrOx	dielectric
SnO2	
ZnOx	
Ag	
NiCrO	
SnO2	
Si3N4	

wherein SixNy (silicon nitride) can be substituted for the TiOx layer, (Laird, page 2, section 0038). Embodiments of Laird can be heat treated, (page 4, section 0049), therefore not teaching away from the use of the layer structure in a heat treated article. As the layer structure of Laird is substantially the same as that claimed by Applicant in claims 23 and 28, the physical characteristics of claims 23 and 28 would be present in the prior art. Applicant's arguments are not persuasive as Applicant has not rebutted the presumption of inherency through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the

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physical limitations of Applicant's claims 23 and 28. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433.

Applicant further contends that Applicant's claims 23 and 28 are entitled to the filing date of parent case 10/400,080 (filed March 27, 2003) and that Laird would not be prior art as Laird is commonly owned with the instant application at the time of invention and thus could not be used in a Section 103 rejection if claims 23 and 28 are entitled to a filing date of March 27, 2003.

Applicant's arguments are not persuasive. While it is noted that 10/400,080 ('080) is a parent case, the present case is a continuation in part. The parent application '080 while disclosing a similar layer structure does include a TiOx layer next to the glass substrate and under a Si3N4/SixNy layer. Although it is mentioned that the TiOx layer is optional, all of the examples include the TiOx layer. In addition, the physical characteristics as set forth in the '080 specification are significantly different from those set forth in the presently pending claims. For the aforementioned reasons, the present claims are not given the priority date of March 27, 2003, but the filing date, August 22, 2003, which would make the Laird rejection Section 103 rejection based upon a Section 102(a) reference.

Claim 39

Applicant contends that Laird does not disclose or suggest a heat treated coated article having a particular T_{vis}/R_s ratio and a certain ΔE^* value as set forth in claim 39. In addition, Hartig cannot cure the fundamental flaws of Laird.

Applicant claims the following layer structure, (claim 39):

glass/silicon nitride/metal oxide/Ag/dielectric

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wherein the silicon nitride is located directly on and contacting the glass substrate and the Ag layer is located directly on and contacting the metal oxide layer with the layer structure having certain physical properties.

The layer structure of Laird as compared to Applicant's claim 39 is set forth below:

<u>Example</u>	<u>Applicant's Claim 39</u>
glass	glass
TiOx	Si3N4
ZnOx	metal oxide
Ag	Ag
NiCrOx	dielectric
SnO2	
ZnOx	
Ag	
NiCrO	
SnO2	
Si3N4	

wherein SixNy (silicon nitride) can be substituted for the TiOx layer, (Laird, page 2, section 0038). Embodiments of Laird can be heat treated, (page 4, section 0049), therefore not teaching away from the use of the layer structure in a heat treated article. As the layer structure of Laird is substantially the same as that claimed by Applicant in claim 39, the physical characteristics of claim 39 would be present in the prior art. Applicant's arguments are not persuasive as Applicant has not rebutted the presumption of inherency through the use of evidence demonstrating that the layer structure of the example would not necessarily possess the physical limitations of Applicant's claim 39. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. Hartig was not used as part of the Section 103 rejection for claim 39.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Gwendolyn Blackwell

Conferees:

Jennifer McNeil

Jennifer Kolb-Michener

JENNIFER MICHENER
QUALITY ASSURANCE SPECIALIST